Small Business Innovation Research/Small Business Tech Transfer

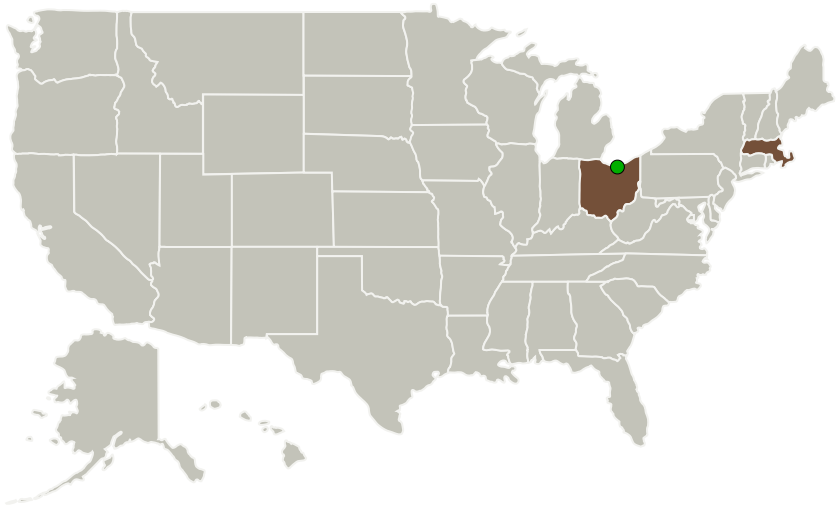
Straight Pore Microfilter with Efficient Regeneration, Phase II

Completed Technology Project (2010 - 2012)

Project Introduction

This Small Business Innovation Research Phase II project is directed toward development of a novel microfiltration filter that has distinctively narrow pore size distribution, low flow resistance, low pressure drop and simple regeneration process. The regeneration process, which requires minimal material and energy consumption, can be completely automated and the filtration performance can be restored within a very short period of time. The overall system filtration efficiency is targeted towards the HEPA standards, where the HEPA filters cannot be regenerated effectively.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
Giner, Inc.	Lead Organization	Industry	Newton, Massachusetts
Glenn Research Center(GRC)	Supporting Organization	NASA Center	Cleveland, Ohio

Primary U.S. Work Locations	
Massachusetts	Ohio

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Project Transitions

January 2010: Project Start

March 2012: Closed out

Closeout Summary: Straight Pore Microfilter with Efficient Regeneration, Phase II Project Image

Closeout Documentation:

- Final Summary Chart Image*(https://techport.nasa.gov/file/140776)*

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Giner, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

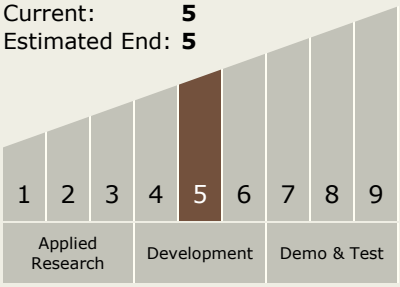
Carlos Torrez

Principal Investigator:

Castro S Laicer

Technology Maturity (TRL)

Start: **5**
Current: **5**
Estimated End: **5**



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Technology Areas

Primary:

- TX06 Human Health, Life Support, and Habitation Systems
  - TX06.1 Environmental Control & Life Support Systems (ECLSS) and Habitation Systems
    - TX06.1.1 Atmosphere Revitalization

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System